

## 2004 Excavations at Mitrou, East Lokris

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In the summer of 2004, a new excavation was begun at the Bronze Age and Early Iron Age site of Mitrou in East Lokris, located on the North Euboean Gulf in central Greece (Fig. 1). The Mitrou Archaeological Project is a *synergasia* co-directed by Aleydis Van de Moortel, assistant professor at the University of Tennessee, and Eleni Zahou, archaeologist of the 14<sup>th</sup> Ephorate of Prehistoric and Classical Antiquities at Lamia. The excavation took place from June 21 through July 30, 2004 and was followed by a short study season. The Mitrou team consisted of almost fifty people from eleven different countries, representing more than twenty different institutions.<sup>1</sup>

<sup>1</sup> The Mitrou project was made possible through the support of Dr. Nina Kyparissi, Director of Prehistoric and Classical Antiquities in the Greek Ministry of Culture, and previously Ephor at Lamia, Mrs. Maria Papakonstantinou, currently acting Ephor, and Prof. John Coleman of Cornell University. We would like to extend our gratitude to them. The 2004 season was financially supported by the University of Tennessee, the Institute of Aegean Prehistory, the Loeb Classical Library Foundation, the Lamia Ephorate, Colby University, and private donors. We are very grateful to all for their generosity. The preliminary results presented here are the work of the entire Mitrou 2004 excavation team: Prof. Kerill O'Neill, Colby College (field director), Ioanna Bibilla (Greek government supervisor), Giuliana Bianco (architect), Prof. Jeremy B. Rutter, Dartmouth College, and Dr. Margaretha Kramer Hajos, Cornell University (pottery analysts), Brian Trail, Florida State University (assistant pottery analyst), Dr. Susan Frankenberg, University of Tennessee (physical anthropologist, trench supervisor), Dr. Joanne Murphy, University of Akron, and Casey Mock, University of Tennessee (trench supervisors), Bartłomiej Lis, University of Warsaw (Total Station), Dr. Nick Hermann, University of Tennessee (G.I.S.), Kostas Diamantis, Lamia Ephorate (topographer), Dr. Panagiotis Karkanas, Ephorate of Palaeoanthropology/

Mitrou is a small tidal islet in the Bay of Atalante, situated in the vicinity of the important prehistoric sites of Orchomenos, Kynos Livanaton, Kalapodi, and Ela-teia, and only 65 km northwest of Lefkandi. The current islet measures about 330 m north-south by 180 m east-west, and has a surface area of 3.6 ha. It is quite flat, rising gently to the north to about 12 m above sea level (Fig. 2). During the Bronze Age, sea level was several meters lower than at present and the site probably was not an islet but part of the mainland, situated on a low rise overlooking the shore. Archaeological remains cover the entire surface of the present islet and continue to the east and west below sea level.

Mitrou has never before been the focus of sustained excavations. We wanted to dig the site for several reasons. Mitrou is among the largest Bronze Age settlements

Speleology, Athens (geoarchaeologist, soil micromorphology), Dr. Amy Bogaard, University of Nottingham, and Dr. Mike Charles, University of Sheffield (ethnobotanists), Kathryn Soar, University of Nottingham (flotation), Evi Goroyianni, University of Cincinnati (registrar/cataloguer), Claire Novotny (assistant cataloguer), Ann Brysbaert, University of Glasgow, and Lesley Acton (conservators), Tina Ross and Roxana Docsan (artists), Winn Burke (photographer), Kostas Xenikakis (balloon photography), Lily Bonga, Cornell University (assistant photographer), Barbara Nielsen Wold and Jozsef Hajos, Cornell University, Leen Cannaearts, Katholieke Universiteit Leuven, Linda Frankenberg, Bryan Burns, University of Southern California, and Molly Richardson, American School of Classical Studies at Athens (volunteers). Dr. Murphy and Prof. Coleman directed a field school that was run through Cornell University. Student trainees were Bart Akin, Sarah Moore, and Esther Springer (University of Tennessee), Malka Benjamin, Brita Lorentzen, and Lindsay Reul (Cornell University), Courtney Chandler (Dartmouth College), and Joanne Tar (Gettysburg College).

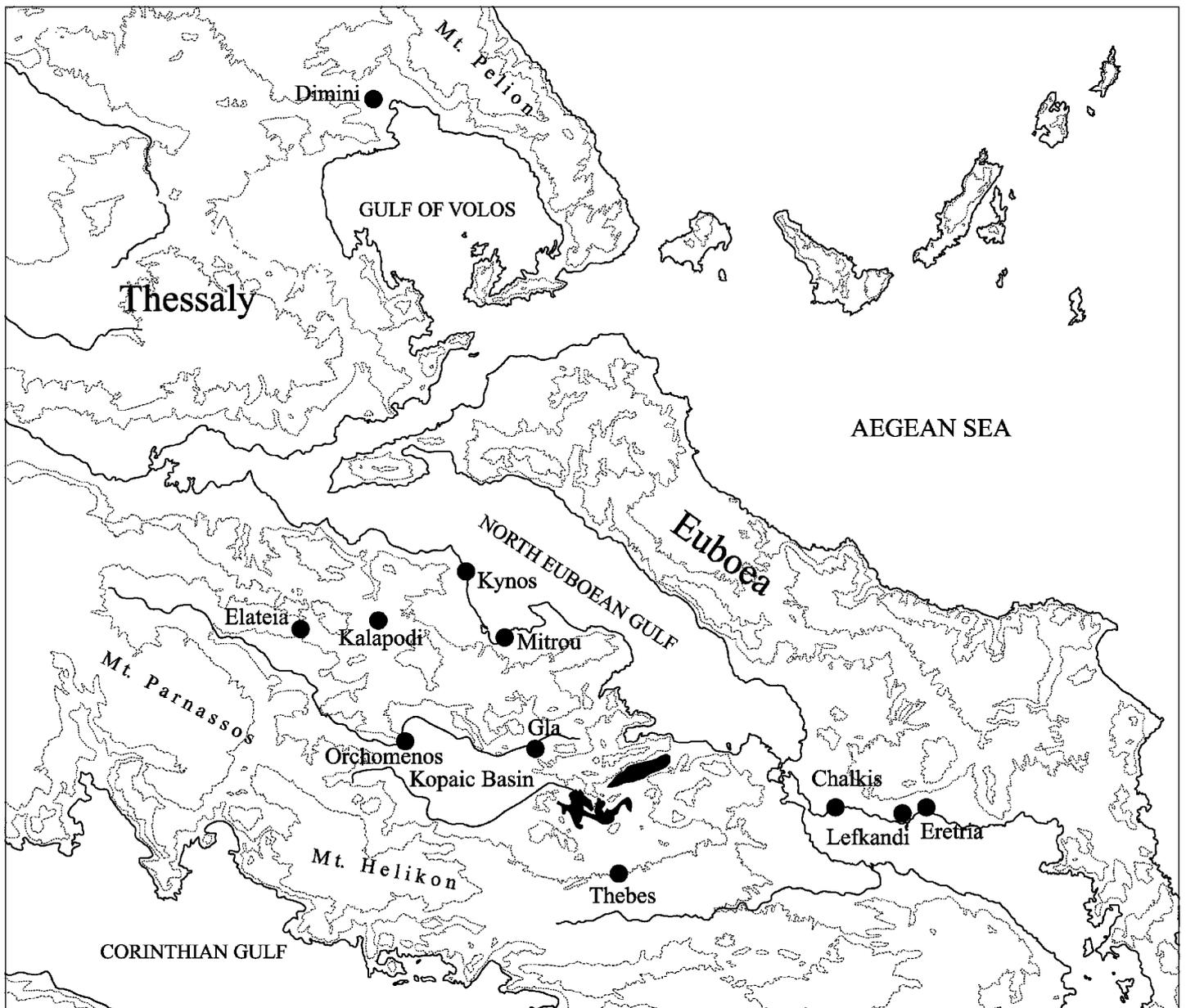


Fig. 1. Map of Central Greece with location of Mitrou and other prehistoric sites (Map Margaretha Kramer-Hajos)

of East Lokris, and it is in an excellent state of preservation (Fig. 3). Natural scarps created by the sea on the east and west sides of the islet show well-stratified remains of all periods of the Bronze Age, including a stratum of the Shaft Grave period identified in 2000 during stratigraphic excavations by Eleni Zahou and Olga Kyriazi of the Lamia Ephorate.<sup>2</sup> Thus Mitrou promised to be an ideal site for studying societal changes in the Bronze Age as well as for establi-

shing a local pottery sequence. Mitrou also is important because of its location on the main passageway, both by land and by sea, between northern and southern Greece, to which also the passes of Thermopylae as well as the Bronze Age and Iron Age sites of Kynos Livanaton, Manika, Vlycha, Lefkandi, Eretria, Aulis, and Oropos belong. Major cultural changes in Greek prehistory have been sometimes attributed to migrations or cultural influxes from the north, nowadays, however, it is rather believed that cultural changes were caused by internal social, economic, and ideological factors. It is one of our goals to investigate those claims.

<sup>2</sup> Presented by O. Kyriazi at the 2002 meeting of the European Association of Archaeologists at Thessaloniki.



Fig. 2. View of the islet of Mitrou in the Bay of Atalanti (photo Margaretha Kramer-Hajos)

During the 2004 season, we exposed an area of 124 sq. m. In all, 21 walls ranging in date from Late Helladic through Middle Protogeometric – roughly the 16<sup>th</sup> through 10<sup>th</sup> centuries B.C. – were uncovered, many with associated earthen floors (Fig. 4). Unlike in southern Greece, occupation at Mitrou does not show a break at the Bronze Age – Iron Age transition. On the contrary, the similar WNW–ESE or NNE–SSW orientation of its Bronze Age and Iron Age walls is indicative of a remarkable degree of continuity.

In the western part of the excavated area, in the space formed by walls 17 and 18, a large group of 26 mostly intact and mendable vases was found dating to the early Late Helladic IIIA2 phase, or the early 14<sup>th</sup> century B.C.<sup>3</sup> This group includes five small drinking vessels (a conical cup, high-handled cup, kantharos, goblet, and a small kylix) and four large drinking vessels (all kylikes). Remarkable is a three-handled unpainted kylix in a local red fabric (Fig. 5). The deposit also includes a krater, two dippers, two pattern-painted piriform jars, two pattern-painted angular alabastra, two medium-coarse cooking pots, a brazier,

<sup>3</sup> The following information is derived from an internal report by Margaretha Kramer-Hajos.

a miniature basin and a stirrup jug. Five kylix feet had been cut to serve as lids, although they did not fit any of the closed vases recovered from the deposit. With the vases there were a bone button decorated with a relief rosette, a biconical spindle whorl, and two pounding stones. About half of the vases were burned, but they otherwise exhibited no traces of wear, as if they had been broken and burned when comparatively new, and subsequently deposited in a context where they could suffer no further weathering. These pots obviously had been redeposited, but they may represent the inventory of a building that burned early in the LH IIIA2 phase. It is not yet clear when this redeposition took place, whether during LH IIIA2 or much later in the Protogeometric period, when this part of the site was used as a cemetery.

Most of the excavated remains date to the Late Helladic IIIC and Protogeometric periods (12<sup>th</sup> – 10<sup>th</sup> century B.C.). The most important architectural find of the final Bronze Age is Building B, which was partially exposed over a length of 9 m. in the southeast part of the excavated area. Its rubble walls, 0.70 to 0.80 m thick, are the most substantial ones found at the site so far. It was possibly constructed in LH IIIC Early and went out of use some time later in the LH IIIC



Fig. 3. Balloon photo of the islet of Mitrou with the excavation trenches roughly in the center (photo Kostas Xenikakis)

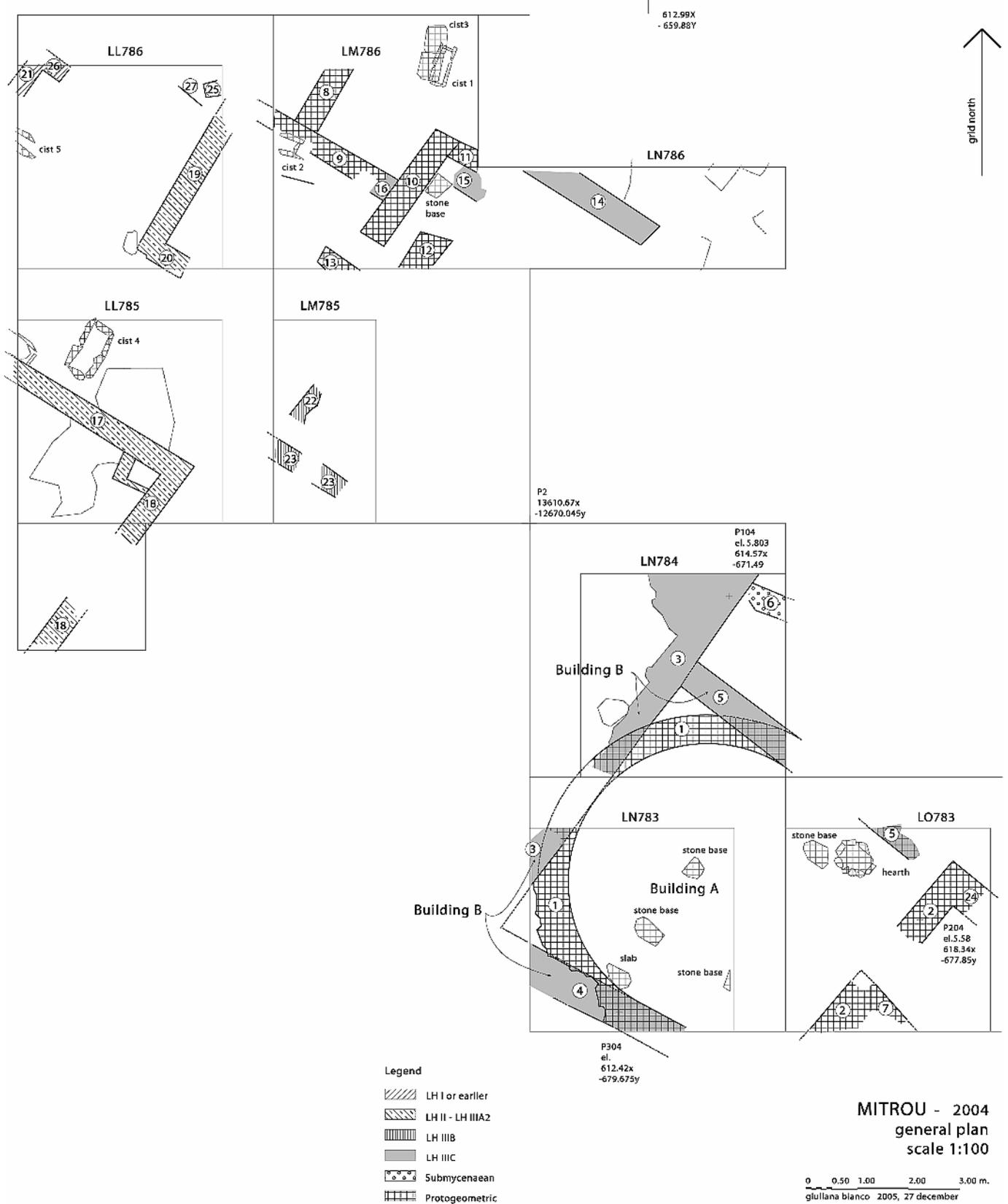


Fig. 4. Mitrou 2004 site plan (Giuliana Bianco)



Fig. 5. Late Helladic IIIA2 three-handled kylix in a local red fabric (photo Winn Burke)

period. At least two rooms have been partially exposed. In the southernmost exposed room, a rounded stone base with a diameter or width of less than 0.50 m was partially uncovered (in trench LN 783) below the northernmost rectangular base of the later Building A. Given its location, it may have belonged to a short row of columns or supports running along the ENE – WSW axis of the room. If this can be confirmed by later excavation, Building B would be comparable to a small number of substantial LH IIIC buildings or rooms with single or double rows of three or more support bases that have been uncovered at Tiryns (*Antenbau* on the upper citadel, possibly Room R115 on the lower citadel, Megaron W and Room 8/00 in the lower city) as well as at Midea (so-called “megaron”) and at Korakou (Houses L and P).<sup>4</sup> With estimated dimensions of ca. 5.5 × 7 m, the southern room of Building B at Mitrou is smaller than most of those other rooms, but

<sup>4</sup> In 2004 we hypothesized that the rectangular supports of Building A had been reused from Building B. Further excavation in 2005 has refuted this hypothesis. For the *Antenbau*, or Building T, at Tiryns and its LH IIIC dating, see J. MARAN, *Das Megaron im Megaron. Zur Datierung und Funktion des Antenbaus im Mykenischen Palast von Tiryns*, AA (2000), 1–16; for Room R115, see K. KILIAN, *Ausgrabungen in Tiryns 1976*, AA (1978), 465–466, fig. 18; for Megaron W, see G. HIESEL, *Späthelladische Hausarchitektur* (Mainz 1990), 63–65, fig. 50), and for Room 8/00, see J. MARAN, *Architektonische Innovation im spätmykenischen Tiryns – Lokale*

its walls are more substantial and its support bases more closely spaced. The buildings at Tiryns and Midea have been related by Walberg and Maran to the emergence of a new ruling elite after the destruction of the Mycenaean palaces. Building B would be the first example of this new building type this far north, and would be important for our understanding of Mitrou’s social structure and contacts with southern Greece during the 12<sup>th</sup> century B.C.

In a small space closed off by a partially destroyed wall in the northernmost area of Building B, a small group of five complete vases was found, including a wheelthrown cooking pot with bones of a piglet, as well as four miniature handmade and unburnished vases (Fig. 6). All have excellent comparanda in the so-called “Submycenaean” Horizon 7 at Kalapodi.<sup>5</sup> It is as yet impossible to say whether these vases represent the last phase of use of Building B or belong to a later structure. A stirrup jar fragment of Attic Submycenaean style was found in the plow zone at some distance to the southeast. Being typical tomb pottery, it suggests the presence of a disturbed Submycenaean grave in this vicinity.

The most important Protogeometric structure at Mitrou is the large apsidal Building A. It was constructed inside the southern room of LH IIIC Building B, with its main axis at a 90-degree angle to that of its predecessor, and it re-used parts of the earlier building’s walls. The fact that the apse was constructed inside a pre-existing rectangular room clearly shows that this shape was consciously preferred by the Protogeometric builders. Building A was partially exposed over a length of 8 m; the width of its excavated part tapers from 6.9 to 6.3 m. The walls of Building A are slightly thinner (0.6 m) than those of Building B, but still thicker than any other wall exposed so far. Because of its imposing size, it is likely that Building A was an elite building as well. It is one of only a dozen large Protogeometric apsidal buildings known from the Greek mainland and the Aegean islands, and one of

Bauprogramme und fremde Kultureinflüsse, in *Althellenische Technologie und Technik* (Weilheim 2004), 277–278, 283, fig. 16. For Midea, G. WALBERG, *The Midea Megaron and Changes in Mycenaean Ideology*, *Aegean Archaeology* 2 (1995), 87–91. For Korakou, C.W. BLEGEN, *Korakou* (Boston and New York 1921), 80–89, figs. 112–118.

<sup>5</sup> The piglet bones were identified by Thomas Webb. M. JACOB-FELSCH, *Die spätmykenische bis frühprotogeometrische Keramik*, in R.C.S. FELSCH (ed.), *Kalapodi I* (Mainz 1996) 98–100.

only four such apsidal buildings with sizeable floor deposits.<sup>6</sup> The re-use of parts of an important final Bronze Age structure by an imposing Early Iron Age building provides an unprecedented example of architectural and spatial continuity across the Bronze Age – Iron Age divide.

The construction date of Building A is not yet known, but a large deposit of broken vases on the floor shows that it came to a violent end in the Middle Protogeometric phase, sometime in the early to middle 10<sup>th</sup> century B.C. Two rows of three roughly cut rectangular stone support bases, 0.30 to 0.60 m long, were set across the apse, with an additional support base set adjacent to the south wall. This arrangement is to some extent paralleled by the two central post holes and wall posts in the apsidal room of the contemporary so-called “Heroon” at Lefkandi. Even though the Lefkandi building (47 × 10 m) is much larger than Building A, the supports of Building A were much more closely spaced.<sup>7</sup> East of the support bases of Building A was a cross wall with a wide entrance (1.7 m), and near this entrance, but just inside of the apsidal room, was an oval hearth built of fieldstones. The area east of the apsidal room was much disturbed and difficult to interpret. In its southern part there may have been a small room such as that found in a comparable location in the Lefkandi “Heroon.”

The presence of sturdy, closely set support bases suggests that Building A had a second floor or at least a loft. The nature of this upper storey is uncertain, but perhaps it is related to a dense layer of over one thousand fist-sized stones found on top of the earthen floor in the apsidal room and the deposit of broken pottery which littered this. The cobbles in question are of limestone and green serpentinite, and vary in shape from rounded to angular. We considered the possibility that they had served as weights to keep a thatched roof in place, but this seems unlikely because of their small

<sup>6</sup> Sizeable Protogeometric apsidal buildings have been found at Thessaloniki Toumba, Lefkandi Toumba (“Heroon”), Asine Karmniola, Nichoria (Building IV-1a, Wall O, Building III-1), Koukounaries (Building A), Antissa, Lesbos (Building III-1), Assiros (House 5), and Poseidi (Building ST): A. MAZARAKIS-AINIAN, *From Rulers’ Dwellings to Temples* (Jonsered 1997), 43–86. Only the apsidal building of Thessaloniki Toumba, Building IV-1a at Nichoria, and Building ST at Poseidi have yielded substantial floor deposits.

<sup>7</sup> J.J. COULTON, *The Toumba Building: Description and Analysis of the Architecture*, in M.R. POPHAM, P.G. KALLIGAS, and L.H. SACKETT (eds), *Lefkandi II. The Protogeometric Building at Toumba, Part 2. The Excavation, Architecture and Finds* (Athens 1993) 39–42, pls. 23, 28.



Fig. 6. Wheelthrown “Submycenaean” cooking pot with bones of a piglet (photo Winn Burke)

size and because they were found exclusively inside the apsidal building. One or two of the stones had red clay adhering to them. It is possible that these stones represent the fallen upper floor itself, embedded in a clay matrix, but this would have made for an improbably heavy second storey. Another possibility is that they are the remains of small dividing walls, and indeed some stones appeared to form alignments. More study is needed to determine their function.

A number of burned clay fragments with impressions of reeds and wooden beams were found both inside and outside the building. They show without a doubt that apsidal Building A had a reed roof as did the Lefkandi “Heroon”. The pitch of the roof of Building A is not yet known. J.J. Coulton reconstructed the roof of the Lefkandi “Heroon” with a 45° pitch on the basis of ethnographic evidence.<sup>8</sup>

The partially excavated floor deposit of Building A included pedestalled cups, deep bowls or skyphoi, jugs, kraters, and pithoi. Many of the vases are closely comparable with pottery from Lefkandi, and possibly were imported from there. A large bell-shaped krater from Mitrou (Fig. 7) with high-quality painted decoration

<sup>8</sup> COULTON (n. 6), 44–49, fig. 1.

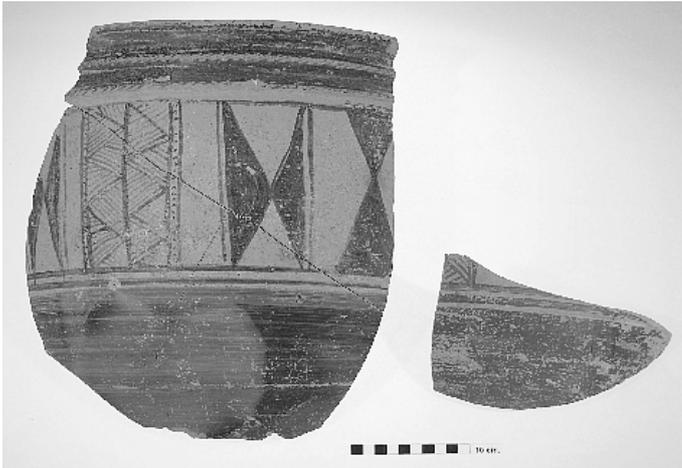


Fig. 7. Middle Protogeometric krater from apsidal Building A (photo Winn Burke)

was obviously a display item and compares very well to some of the kraters found in the fill above the elite graves of the Lefkandi “Heroon” as well as to the famous monumental krater 327 found on the floor just south of the burial shaft, which is thought to have been a grave marker.<sup>9</sup> The presence of similar kraters in Building A at Mitrou suggests a high status for its inhabitants.

Other finds from Building A include a stone spindle whorl, a perforated circular sherd possibly used as a spindle whorl, and a stone loomweight found near the hearth east of the support bases. Crushed on the floor in the center of the apse was a fragmentary cattle skull with part of a horn as well as a blue stone bead, a loomweight, and stone tools. A large bronze finger ring, probably belonging to a male, was found in the sediments above the floor, and may have been used in this building as well. Other finds from those sediments include spindle whorls, stone tools, a grinding stone, crucible, stone plaque, and part of a terracotta figurine. These finds are comparable to those found in the floor deposits of other Protogeometric apsidal buildings.

The large number of objects crushed in place on the floor of the apsidal building suggest that it met a violent end, but it is not clear whether through natural causes or human agency. There are abundant traces of fire, but these are limited to the upper parts of the destruction deposit and walls. Lower down there is no

burning. Thus it is unlikely that fire destroyed the building; the burning detected appears to have happened well after Building A’s demise.

The latest interesting architectural find was a cylindrical column base of unbaked yellow clay, 0.18 m in diameter and 0.20 m high, sitting over the corner of Protogeometric walls 8 and 9 in the area northwest of apsidal Building A. No floor was associated with it, but it may well be of Geometric date (Fig. 8). Similar clay bases have been found in 8<sup>th</sup>-century buildings at Eretria (Buildings A, B, C and elsewhere), Lefkandi-Xeropolis, and Pithekoussai.<sup>10</sup>

Among the smaller walls to the northwest of the apsidal building, five cist tombs were found. One tomb was empty, but the others contained child inhumations and a few simple grave goods – mostly pottery. The earliest is cist 5, which contained a clay cup of LH IIIC or Early Protogeometric date. Most remarkable was cist tomb 3 with three successive child burials separated by pebble layers. The lowest was that of a 6 to 9 year old child buried with four complete Middle Protogeometric clay vases and a polished stone (Fig. 9). An iron dress pin with a bronze globe found in the left thigh area may have held a burial shroud. The three burials were disturbed by the later insertion of a fetal cranium. The deposition of simple clay vessels with child inhumations is a widespread custom in Protogeometric Greece.

## Discussion

Even though many questions remain unanswered, the results of the first excavation season at Mitrou already allow us to make some important observations. First, there is the striking continuity between the Late Bronze Age and the Early Iron Age, visible in the presence of pottery from every subphase bridging the Bronze Age – Iron Age transition as well as in the similar orientation of walls from at least LH I through Middle Protogeometric, spanning a period of at least 600 years. It is especially evident in the similar location of the most important LH IIIC and Protogeometric buildings and, further north, in the superposition of Protogeometric and LH IIIC walls. All this suggests that property boundaries remained the same across the Late Bronze Age – Early Iron Age divide.

<sup>9</sup> R.W.V. CATLING and I.S. LEMOS, *Lefkandi II. The Protogeometric Building at Toumba, Part I. The Pottery* (Athens 1990), 25 – 26, pls. 54 – 59.

<sup>10</sup> MAZARAKIS AINIAN (n. 5), 59 – 60, note 159.



Fig. 8. Unbaked clay column base dating to the Early Iron Age or later (photo Winn Burke)



Fig. 9. Middle Protogeometric cist tomb with the body of a 6 to 9 year old child (photo Winn Burke)

Strong continuity is also seen in the locally made pottery. Handmade Burnished Ware was produced and used already in the LH IIIC phase at Mitrou, and continued to be made in great quantities into the Proto-geometric period. It remains to be seen whether continuity extends also to other aspects of human behavior, such as the production and consumption of other craft goods, agricultural practices, animal husbandry, diet, or burial customs.

Mitrou is not the only site on the North Euboean Gulf to have been used continuously from the Bronze Age into the Iron Age. Also Kynos Livanaton, the sanctuary at Kalapodi, and the cemetery at Elateia have final Bronze Age and Early Iron Age remains. Thus it appears that the inhabitants of this region of east-central Greece, unlike those living in areas further south from Boeotia to the Peloponnese, did not experience a major cultural break at the transition from the final Bronze Age to the Early Iron Age, and suffered much less of a decline in material culture than did their southern neighbors.

There are, however, signs at Mitrou of reduced outside contacts. A lot of the wheelmade Proto-geometric pottery at the site, imported from Lefkandi and elsewhere, had been mended with lead clamps, whereas none of the local handmade pottery had been mended.<sup>11</sup> It is possible that these imported vases were considered precious and difficult to replace, and this may well reflect unsettled conditions elsewhere.

With its well-preserved remains Mitrou has proven to be an important site for the study of the Bronze Age to Iron Age transition in the Euboean Gulf. Continued excavation is expected to provide us with even more information about this crucial period of Greek pre-history.

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<sup>11</sup> Observation made by Jeremy B. Rutter.